DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

(707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008196 Address: 333 Burma Road **Date Inspected:** 02-Aug-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Guo Peng, Li Lin No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower components

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Dilip Chakrabarti was present during the times noted above for observations relative to the work being performed.

Bay# 11- Tower Assembly:

This QA Inspector randomly observed the following work in progress:

FCAW Process:

Welding of weld joint# 5 located on PCMK WSD1 FDSA4-2 D/D. Welder is identified as 070212. ZPMC QC is identified as Li Lin. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P5-F.

Welding of weld joint# 6 located on PCMK WSD1 FDSA4-2 D/D. Welder is identified as 070140. ZPMC QC is identified as Li Lin. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P5-F.

Welding of weld joint# 47 located on PCMK WSD1 FDSA4-2 D/D. Welder is identified as 069043. ZPMC QC is identified as Li Lin. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P5-F.

Welding of weld joint# 48 located on PCMK WSD1 FDSA4-2 D/D. Welder is identified as 070046. ZPMC QC is identified as Li Lin. The welding variables recorded by QC appeared to comply with the specified WPS no.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

B-T-2332-TC-P5-F.

Welding of weld joint# 5 located on PCMK WSD1 FDSA4-2 D/D. Welder is identified as 066471. ZPMC QC is identified as Guo Peng. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P5-F.

Welding of weld joint# 6 located on PCMK WSD1 FDSA4-2 D/D. Welder is identified as 070254. ZPMC QC is identified as Guo Peng. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P5-F.

Welding of weld joint# 47 located on PCMK WSD1 FDSA4-2 D/D. Welder is identified as 068864. ZPMC QC is identified as Guo Peng. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P5-F.

Welding of weld joint# 48 located on PCMK WSD1 FDSA4-2 D/D. Welder is identified as 066882. ZPMC QC is identified as Guo Peng. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P5-F.

Welding of weld joint# 5 located on PCMK WSD1 FDSA4-2 D/D. Welder is identified as 068206. ZPMC QC is identified as Guo Peng. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P5-F.

Welding of weld joint# 6 located on PCMK WSD1 FDSA4-2 D/D. Welder is identified as 067184. ZPMC QC is identified as Guo Peng. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P5-F.

SAW Process:

Welding of weld joint# 1A located on PCMK WD1 A5007-13, 14, 15, 16. Welder is identified as 047304. ZPMC QC is identified as Chen Hong Yun. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-3221-TC-U5-S-1.

Welding of weld joint# 1A located on PCMK WD1 A5007-13, 14, 15, 16. Welder is identified as 041706. ZPMC QC is identified as Chen Hong Yun. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-3221-TC-U5-S-1.

Welding of weld joint# 300A located on PCMK WD1 A504 A/C. Welder is identified as 040699. ZPMC QC is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2221-B-L2c-S-2.

Final VT:

This QA inspector performed Final Visual Testing (FVT) of entire welded area previously tested and accepted by ZPMC Quality Control personnel of the member and weld designated are as follows:

Sl # Section # Weld # Green Tag # Location

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

- 1. WD1- A115 H/J 61 NA NA
- 2. WD1- A115 H/J 62 NA NA
- 3. WD1- A115 H/J 51 NA NA
- 4. WD1- A115 H/J 52 NA NA
- 5. WD1- A115 G/J 61 NA NA
- 6. WD1- A115 G/J 60 NA NA
- 7. WD1- A115 G/J 51 NA NA
- 8. WD1- A115 G/J 50 NA NA
- 9. WD1- A115 D/J 56 NA NA
- 10. WD1- A115 D/J 57 NA NA
- 11. WD1- A115 D/J 51 NA NA
- 12. WD1- A115 D/J 50 NA NA
- 13. WD1- A115 D/J 122 NA NA
- 14. WD1- A115 D/J 123 NA NA
- 15. WD1- A115 D/J 183 NA NA
- 16. WD1- A115 D/J 184 NA NA

SMAW Process:

This QA Inspector observed that welding of weld joint# 14B located on PCMK WSD1 FCSA4-2 C/C, was being carried out by the welder identified as 053916. ZPMC QC was identified as Fu Wei Min. Welding variables recorded by ZPMC QC appeared not to comply with the specified WPS no. B-T-3212-TC-U5b-1 as the base materials preheat temperature recorded was less than 180C as required by the WPS. This QA Inspector issued Incident report due to the low base material preheat temperature.

It was also observed by this QA Inspector that the storage oven for the E9018M-H4R electrodes stored inside the oven was unplugged. This QA Inspector informed ZPMC QC Inspector Fu Wei Min, who was not aware of the fact. The QC Inspector then plugged the storage oven to the power source.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

Unless otherwise noted, all work observed on this date appeared to be generally comply with applicable contract documents.





Summary of Conversations:

See above

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Chakrabarti, Dilip Kumar	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer